

Sec. 3011. Report on National Institute of Standards and Technology efforts to recruit and retain early career science and engineering researchers.

Sec. 3012. Technology Innovation Program.

Sec. 3013. Technical amendments to the National Institute of Standards and Technology Act and other technical amendments.

Sec. 3014. Retention of depreciation surcharge.

Sec. 3015. Post-doctoral fellows.

TITLE IV—OCEAN AND ATMOSPHERIC PROGRAMS

Sec. 4001. Ocean and atmospheric Research and development Program.

Sec. 4002. NOAA ocean and atmospheric Science education Programs.

Sec. 4003. NOAA's contribution to innovation.

TITLE V—DEPARTMENT OF ENERGY

Sec. 5001. Short title.

Sec. 5002. Definitions.

Sec. 5003. Science, engineering, and mathematics education at the Department of Energy.

Sec. 5004. Nuclear science talent expansion program for institutions of higher education.

Sec. 5005. Hydrocarbon systems science talent expansion program for institutions of higher education.

Sec. 5006. Department of Energy early career awards for science, engineering, and mathematics researchers.

Sec. 5007. Authorization of appropriations for Department of Energy for basic research.

Sec. 5008. Discovery science and engineering innovation institutes.

Sec. 5009. Protecting America's Competitive Edge (PACE) graduate fellowship program.

Sec. 5010. Sense of Congress regarding certain recommendations and reviews.

Sec. 5011. Distinguished scientist program.

Sec. 5012. Advanced Research Projects Agency—Energy.

TITLE VI—EDUCATION

Sec. 6001. Findings.

Sec. 6002. Definitions.

Subtitle A—Teacher Assistance

PART I—TEACHERS FOR A COMPETITIVE TOMORROW

Sec. 6111. Purpose.

Sec. 6112. Definitions.

Sec. 6113. Programs for baccalaureate degrees in science, technology, engineering, mathematics, or critical foreign languages, with concurrent teacher certification.

Sec. 6114. Programs for master's degrees in science, technology, engineering, mathematics, or critical foreign language education.

Sec. 6115. General provisions.

Sec. 6116. Authorization of appropriations.

PART II—ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS

Sec. 6121. Purpose.

Sec. 6122. Definitions.

Sec. 6123. Advanced Placement and International Baccalaureate Programs.

PART III—PROMISING PRACTICES IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS TEACHING

Sec. 6131. Promising practices.

Subtitle B—Mathematics

Sec. 6201. Math Now for elementary school and middle school students program.

Sec. 6202. Summer term education programs.

Sec. 6203. Math skills for secondary school students.

Sec. 6204. Peer review of State applications.

Subtitle C—Foreign Language Partnership Program

Sec. 6301. Findings and purpose.

Sec. 6302. Definitions.

Sec. 6303. Program authorized.

Sec. 6304. Authorization of appropriations.

Subtitle D—Alignment of Education Programs

Sec. 6401. Alignment of secondary school graduation requirements with the demands of 21st century postsecondary endeavors and support for P-16 education data systems.

Subtitle E—Mathematics and Science Partnership Bonus Grants

Sec. 6501. Mathematics and science partnership bonus grants.

Sec. 6502. Authorization of appropriations.

TITLE VII—NATIONAL SCIENCE FOUNDATION

Sec. 7001. Definitions.

Sec. 7002. Authorization of appropriations.

Sec. 7003. Reaffirmation of the merit-review process of the National Science Foundation.

Sec. 7004. Sense of the Congress regarding the mathematics and science partnership programs of the Department of Education and the National Science Foundation.

Sec. 7005. Curricula.

Sec. 7006. Centers for research on learning and education improvement.

Sec. 7007. Interdisciplinary research.

Sec. 7008. Postdoctoral research fellows.

Sec. 7009. Responsible conduct of research.

Sec. 7010. Reporting of research results.

Sec. 7011. Sharing research results.

Sec. 7012. Funding for successful science, technology, engineering, and mathematics education programs.

Sec. 7013. Cost sharing.

Sec. 7014. Additional reports.

Sec. 7015. Administrative amendments.

Sec. 7016. National Science Board reports.

Sec. 7017. Program Fraud Civil Remedies Act of 1986 amendment.

Sec. 7018. Meeting critical national science needs.

Sec. 7019. Research on innovation and inventiveness.

Sec. 7020. Cyberinfrastructure.

Sec. 7021. Pilot program of grants for new investigators.

Sec. 7022. Broader impacts merit review criterion.

Sec. 7023. Donations.

Sec. 7024. High-performance computing and networking.

Sec. 7025. Science, technology, engineering, and mathematics talent expansion program.

Sec. 7026. Laboratory science pilot program.

Sec. 7027. Study on laboratory equipment donations for schools.

Sec. 7028. Mathematics and Science Education Partnerships amendments.

Sec. 7029. National Science Foundation teacher institutes for the 21st century.

Sec. 7030. Robert Noyce Teacher Scholarship Program.

Sec. 7031. Encouraging participation.

Sec. 7032. National Academy of Sciences report on diversity in science, technology, engineering, and mathematics fields.

Sec. 7033. Hispanic-serving institutions undergraduate program.

Sec. 7034. Professional science master's degree programs.

Sec. 7035. Sense of Congress on communications training for scientists.

Sec. 7036. Major research instrumentation.

Sec. 7037. Limit on proposals.

TITLE VIII—GENERAL PROVISIONS

Sec. 8001. Collection of data relating to trade in services.

Sec. 8002. Sense of the Senate regarding small business growth and capital markets.

Sec. 8003. Government Accountability Office review of activities, grants, and programs.

Sec. 8004. Sense of the Senate regarding anti-competitive tax policy.

Sec. 8005. Study of the provision of online degree programs.

Sec. 8006. Sense of the Senate regarding deemed exports.

Sec. 8007. Sense of the Senate regarding capital markets.

Sec. 8008. Accountability and transparency of activities authorized by this Act.

TITLE I—OFFICE OF SCIENCE AND TECHNOLOGY POLICY; GOVERNMENT-WIDE SCIENCE

SEC. 1001. NATIONAL SCIENCE AND TECHNOLOGY SUMMIT.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the President shall convene a National Science and Technology Summit to examine the health and direction of the United States' science, technology, engineering, and mathematics enterprises. The Summit shall include representatives of industry, small business, labor, academia, State government, Federal research and development agencies, non-profit environmental and energy policy groups concerned with science and technology issues, and other nongovernmental organizations, including representatives of science, technology, and engineering organizations and associations that represent individuals identified in section 33 or 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a or 1885b).

(b) REPORT.—Not later than 90 days after the date of the conclusion of the Summit, the President shall submit to Congress a report on the results of the Summit. The report shall identify key research and technology challenges and recommendations, including recommendations to increase the representation of individuals identified in section 33 or 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a or 1885b) in science, engineering, and technology enterprises, for areas of investment for Federal research and technology programs to be carried out during the 5-year period beginning on the date the report is issued.

(c) ANNUAL EVALUATION.—Beginning with the President's budget submission for the fiscal year following the conclusion of the National Science and Technology Summit and for each of the following 4 budget submissions, the Analytical Perspectives component of the budget document that describes the Research and Development budget priorities shall include a description of how those priorities relate to the conclusions and recommendations of the Summit contained in the report required under subsection (b).

SEC. 1002. STUDY ON BARRIERS TO INNOVATION.

(a) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall enter into a contract with the National Academy of Sciences to conduct and complete a study to identify, and to review methods to mitigate, new forms of risk for businesses beyond conventional operational and financial risk that affect the ability to innovate, including studying and reviewing—

(1) incentive and compensation structures that could effectively encourage long-term value creation and innovation;

(2) methods of voluntary and supplemental disclosure by industry of intellectual capital, innovation performance, and indicators of future valuation;

(3) means by which government could work with industry to enhance the legal and regulatory framework to encourage the disclosures described in paragraph (2);

(4) practices that may be significant deterrents to United States businesses engaging in innovation risk-taking compared to foreign competitors;